

A. CLASSIFICATION OF SUBJECT MATTER
 IPC 7 B60G7/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 B60G

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EP 0 733 499 A (TOYOTA MOTOR CO LTD) 25 September 1996 (1996-09-25) cited in the application abstract; figures 9-17,20,21	1-8
A	PATENT ABSTRACTS OF JAPAN vol. 1996, no. 11, 29 November 1996 (1996-11-29) -& JP 08 188022 A (F TECH:KK); 23 July 1996 (1996-07-23) abstract; figures 1-3,6,8	1-8
A	EP 1 223 058 A (HONDA MOTOR CO LTD) 17 July 2002 (2002-07-17) abstract; figures 1,2,5 -/-	1-8

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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Date of the actual completion of the international search

2 June 2004

Date of mailing of the international search report

25/06/2004

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P, A	EP 1 346 855 A (BENTELER AUTOMOBILTECHNIK GMBH) 24 September 2003 (2003-09-24) abstract; figures 1-3 -----	1-8
A	US 6 241 267 B1 (DZIADOSZ LAWRENCE M ET AL) 5 June 2001 (2001-06-05) abstract; figures 5-10 -----	1-8

Patent document cited in search report	Classification date	Patent family member(s)	Publication date
EP 0733499	A	25-09-1996	JP 8318722 A 03-12-1996
		CN 1137983 A 18-12-1996	
		DE 69615889 D1 22-11-2001	
		DE 69615889 T2 20-06-2002	
		EP 0733499 A1 25-09-1996	
		KR 219925 B1 01-09-1999	
		US 5662348 A 02-09-1997	
JP 08188022	A	23-07-1996	NONE
EP 1223058	A	17-07-2002	JP 2002205520 A 23-07-2002
		BR 0200046 A 22-10-2002	
		CN 1364670 A 21-08-2002	
		EP 1223058 A2 17-07-2002	
EP 1346855	A	24-09-2003	DE 10212791 A1 16-10-2003
		EP 1346855 A2 24-09-2003	
US 6241267	B1	05-06-2001	AT 248720 T 15-09-2003
		AU 2065401 A 18-06-2001	
		BR 0015711 A 09-07-2002	
		CA 2391294 A1 14-06-2001	
		DE 60005055 D1 09-10-2003	
		DE 60005055 T2 03-06-2004	
		EP 1237740 A1 11-09-2002	
		ES 2202202 T3 01-04-2004	
		WO 0142034 A1 14-06-2001	